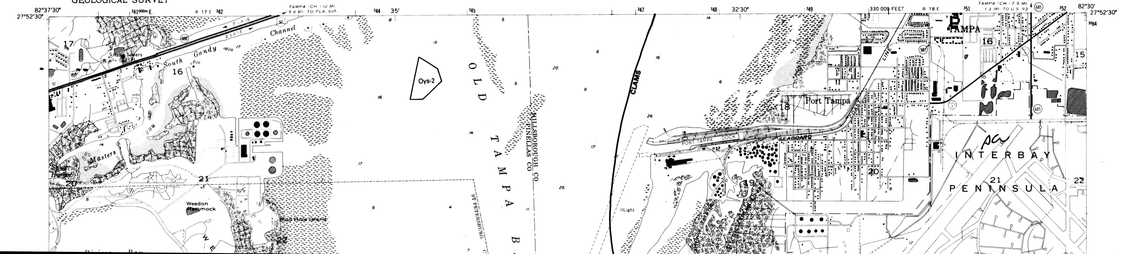
I 49.89/2: 85(15) map A11

I 49.89/2:85(15)map A11

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PORT TAMPA QUADRANGLE
FLORIDA
7.5 MINUTE SERIES (TOPOGRAPHIC)

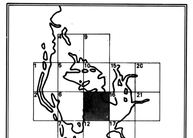


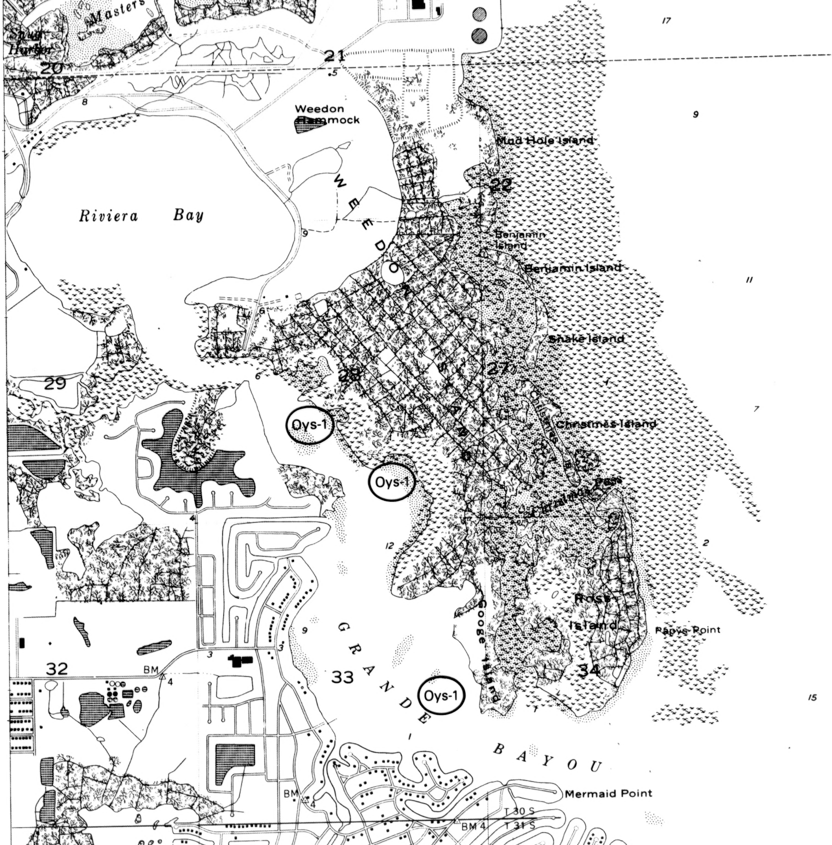
MAP A11

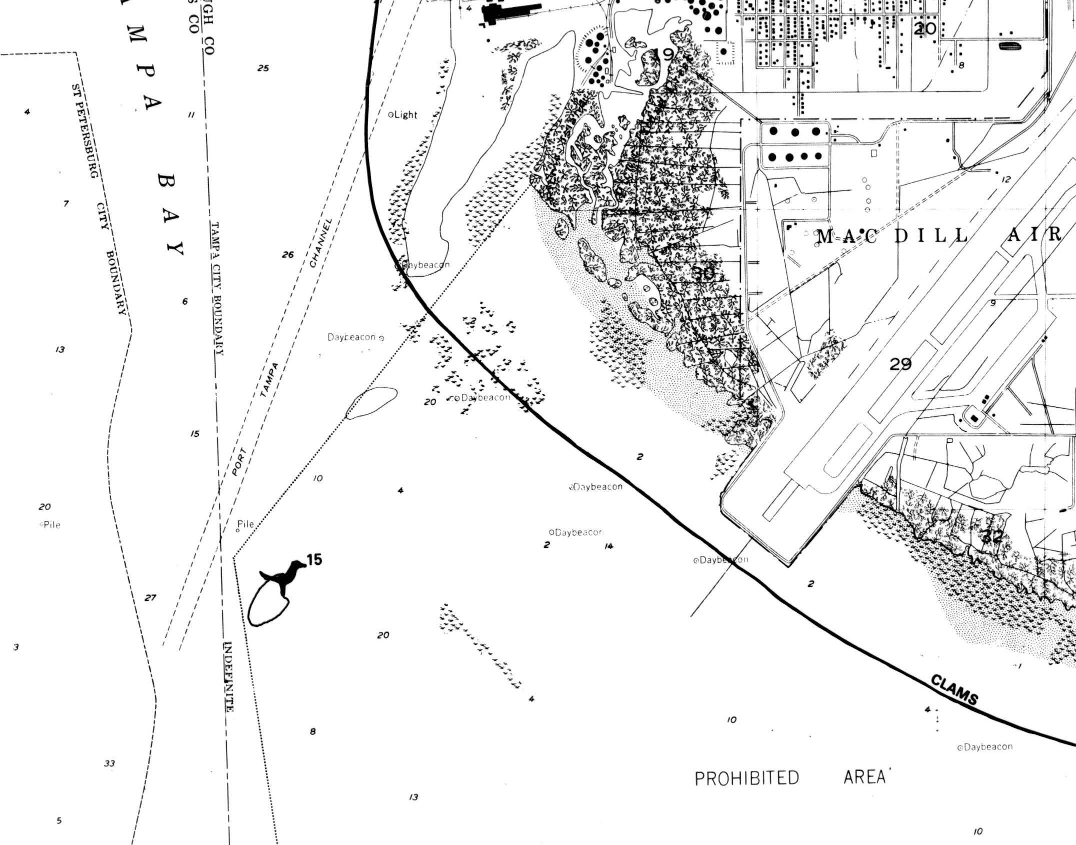
TAMPA BAY ENVIRONMENTAL ATLAS

BIOLOGICAL RESOURCES

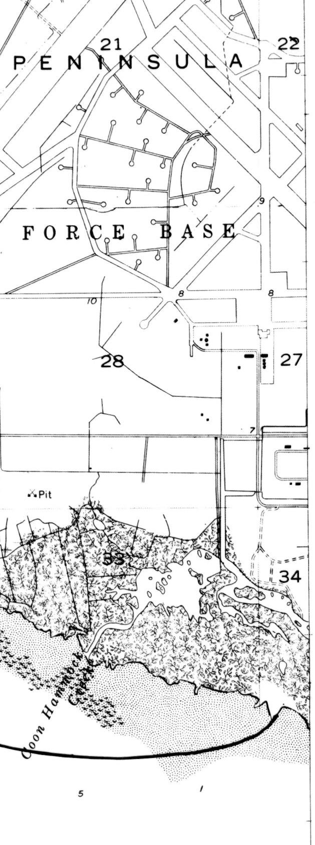
PORT TAMPA

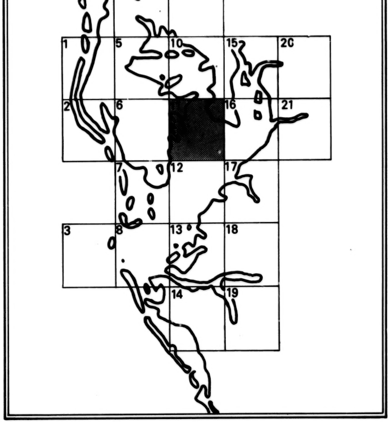



Masters
Snug Harbor
20
21
17
.5
8
Weedon Hammock
Mud Hole Island
9
Riviera Bay
WEEDON ISLAND
22
Benjamin Island
Benjamin Island
11
6
Snake Island
29
28
27
7
Oys-1
Christines Island
Oys-1
Christines Pass
4
12
2
Ross Island
Papys Point
Googe Island
9
3
3
GRANDE BAYOU
32
BM
4
33
Oys-1
34
15
1
BM
4
Mermaid Point
T 30 S
T 31 S
BM 4



AMPA BAY
UGH CO
S CO
ST PETERSBURG CITY BOUNDARY
TAMPA CITY BOUNDARY
PORT TAMPA CHANNEL
INDEFINITE
Light
Daybeacon
Daybeacon
Daybeacon
Daybeacon
Daybeacon
Daybeacon
Daybeacon
Pile
Pile
15
MAC DILL AIR
9
20
30
29
32
CLAMS
PROHIBITED AREA


21
22
PENINSULA
FORCE BASE
9
8
8
10
28
27
7
Pit
33
34
Coon Hammock Creek
5


1
5
10
15
20
2
6
16
21
7
12
17
3
8
13
18
14
19

Scale 1:24,000

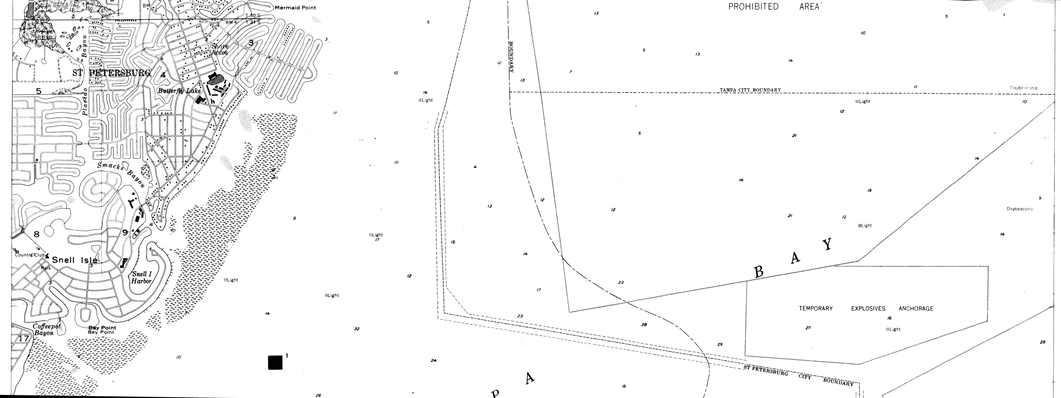
U.S. DEPARTMENT OF THE INTERIOR
MARCH 3, 1849

1984

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17: Universal Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from



Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There are no maps A19, A20, A21 due to a lack of data.

LEGEND

SHELLFISH HARVEST AREA
(Florida Dept. of Natural Resources)

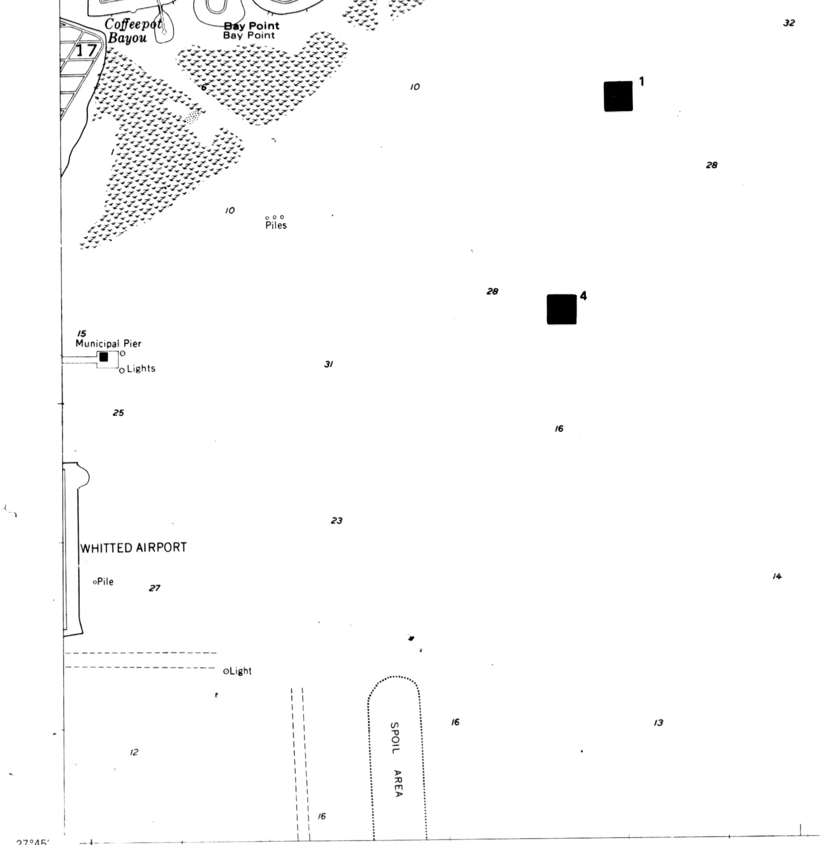
SHA	Shellfish Harvest Approved
SHCA	Shellfish Harvest Conditionally Approved

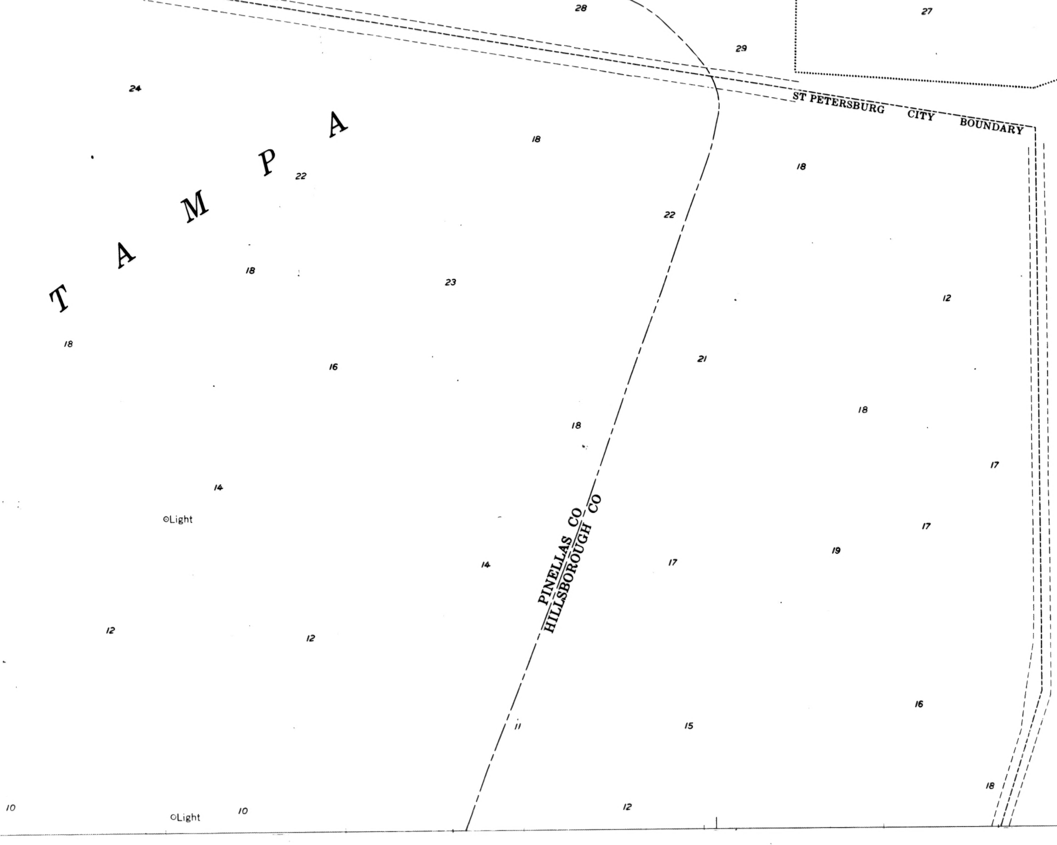
NOTE: Due to Dept. of Natural Resources (DNR) water quality standards all other estuarine areas are prohibited or unclassified as to shellfish harvest status and are officially unapproved. For further info. on status of harvest areas contact DNR - Shellfish Environmental Assessment Section.

Oys-1	Public Oyster Bed
Oys-2	Private Oyster Bed (Lease)
CLAMS	Clam Bed

FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Hook and Line Fishing)

SPECIES #	FINFISH CATEGORY Common Name	SPAWNING LOCATION	SPAWNING SEASON J F M A M J J A S O N D	MAJOR NURSERY HABITATS: SHALLOW AREAS	Seagrass	Mangrove	Marsh	Tidal Flat	Oyster Bar	MAJOR NURSERY HABITATS: DEEP AREAS	Seagrass	Mangrove	Marsh	Tidal Flat	Oyster Bar	MAJOR ADULT HABITATS	Seagrass	Mangrove	Marsh	Tidal Flat	Oyster Bar	OFFSHORE SPAWNING
	ESTUARINE DEPENDENT FISHES																					
1	Spotted Seatrout																					
2	Red Drum																					
3	Snook																					
4	Tarpon																					
5	Striped Mullet																					
6	Pompano																					
7	Sheepshead																					
8	Gray Snapper																					
9	Blue Crab																					
10	Stone Crab																					
11	Spiny Lobster																					
12	Pink Shrimp																					
13	White Shrimp																					
14	Brown Shrimp																					
15	Eastern Oyster																					
16	Hard Clam																					
	ESTUARINE DEPENDENT FISHES																					
17	Bluefish																					
18	Florida Pompano																					
19	Jack Crevalle																					
20	Ladyfish																					
21	Mackerel																					
22	Mullet																					
23	Permit																					
24	Red Snapper																					
25	Sailfish																					
26	Sharks																					
27	Snapper																					
28	Spanish Mackerel																					
29	Tripletail																					
30	Weakfish																					
31	Yellowfin Menhaden																					
	ESTUARINE DEPENDENT FISHES																					
32	Atlantic Croaker																					
33	Black Drum																					
34	Flounder																					
35	Gag																					
36	Grouper																					
37	Hogfish																					
38	Scamp																					
39	Scup																					
40	Sea Bass																					
41	Silver Perch																					
42	Southern Kingfish																					
43	Spot																					
44	Tilefish																					
45	Vermilion Snapper																					
46	Yellowtail																					


Coffeepot Bayou
17
Bay Point
Bay Point
6
10
1
32
1
28
1
10
Piles
28
4
15
Municipal Pier
Lights
31
25
16
23
WHITTED AIRPORT
Pile
27
14
Light
16
13
SPOIL AREA
12
16
27°45'


TAMPA
ST PETERSBURG CITY BOUNDARY
PINELLAS CO
HILLSBOROUGH CO
Light
Light
28
27
29
24
18
22
18
22
18
23
12
18
16
21
18
18
17
14
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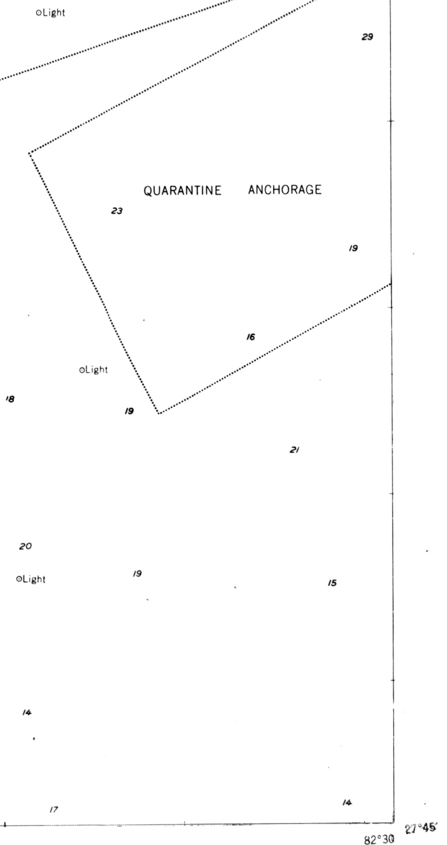
10
12



Light
29
QUARANTINE ANCHORAGE
23
19
16
Light
18
19
21
20
Light
19
15
14
17
14
82°30
27°45'

FINFISH SPAWNING, NURSERY AND HARVEST AREAS

(Recreational Hook and Line Fishing)

SPECIES #	FINFISH CATEGORY Common Name	SPAWNING													NURSERY AREA[1]	MAJOR NURSERY HABITATS							AREA OF ADULT ABUNDANCE[1]	MAJOR ADULT HABITATS						MIGRATION TYPE[2]
		LOCATION[1]	SEASON													Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef	Open Water		Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water	
			J		M		M		J		S		N																	
	ESTUARINE DEPENDENT FISHES																													
1	Red Drum	C	■	■							■	■	■	■	E	●	●	●					E	●	●	●				2
2	Spotted Seatrout	E			■	■	■	■	■	■	■	■			E	●	●	●					E	●	●					2
3	Snook	C					■	■	■						E	●	●	●					E	●	●					2
4	Sheepshead	C			■	■	■								C	●							C-E			●		●		1
5	Southern Flounder	C									■	■	■	■	C-E	●			●				C-E	●		●				2
6	Florida Pompano	CS				■	■	■	■	■	■	■			C-E				●				C-E			●			●	3
7	Striped Mullet	CS	■									■	■	■	E	●	●	●					E	●	●	●				3
8	Gulf Menhaden	C	■	■	■								■	■	E	●	●	●					C-E	●		●			●	3
9	Spanish Sardine	C						■	■	■	■				E	●	●	●					C-E	●		●			●	3
10	Black Drum	C	■	■	■	■	■						■	■	E	●	●	●					E	●	●	●				1
	REEF FISHES																													
11	Red Grouper	CS			■	■	■	■							CS-C	●				●	●		CS				●	●		2
12	Jewfish	CS							■	■					CS-C	●				●	●		CS-C				●	●		2
13	Gag Grouper	CS	■	■	■	■								■	CS-C	●				●	●		CS-C				●	●		2
14	Scamp	CS			■	■									CS	●				●	●		CS				●	●		2
15	Red Snapper	CS							■	■	■	■			CS-C	●				●	●		CS-C				●	●		2
16	Mangrove Snapper	CS				■	■	■	■	■					C-E	●	●						C-E				●	●		2
	COASTAL PELAGIC FISHES																													
17	King Mackerel	OCS					■	■	■	■	■				CS							●	CS-C				●	●	●	4
18	Spanish Mackerel	CS					■	■	■	■	■				CS							●	CS-C				●	●	●	4

[1] KEY:

E — Estuarine
C — Coastal
CS — Continental Shelf
OCS — Outer Continental Shelf

[2] MIGRATION TYPE:

1 — Residentially Restricted
2 — Random Residential Range
3 — Restricted Migration
4 — Extensive Migration

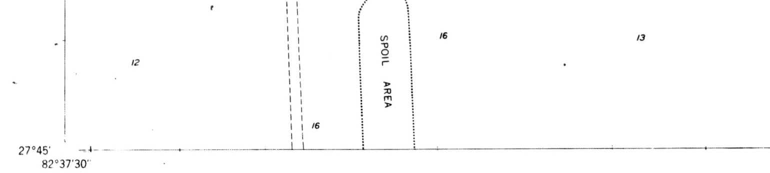
COLONIAL BIRD NESTING SITE *

Number appearing with symbol indicates colony sites. Colony sites and species - composition data are included in the narrative.

Shorebird

Wading Bird

Brown Pelican



THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

Selected areas on this U.S.G.S. base map updated using information extracted from aerial photography. This information not field checked.

PRIMARY SOURCES OF MAPPED INFORMATION:

SHELLFISH HARVEST AREAS: Shellfish Harvest Area Maps, Dept. of Natural Resources, 1982.

PUBLIC & PRIVATE OYSTER BEDS: Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida, McNulty, Lindall and Sykes, 1972.

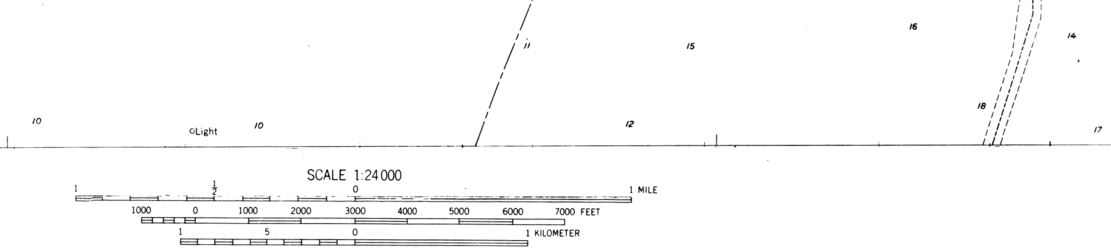
CLAMS: Personal Communication, Discussion of Distribution Clams in Tampa Bay and Adjacent Brackish Waters, Mr. L. Tracy Three T's Clam Company, 1983. Mike Sprague, Draft Maps, Department of Natural Resources, 1984

SCALLOP BEDS: Personal Communication, Mr. Bill Lyons Dept. of Natural Resources, Marine Research Laboratory, 1982

FINFISH SPAWNING, NURSERY & HARVEST AREAS: Florida's Fishing Grounds, Moe, 1970.

BIRD NESTING SITES: Florida Atlas of Breeding Sites for Herons and Their Allies: 1976-78, Nesbitt, S.A., Ogden, J.C., Kale II, H.W., et.al. U.S. Fish and Wildlife Service, 1982. Personal Communication, Maps and Data, Dr. H.W. Kale II, Florida Audubon Society, 1982

MICROCOPY RESOLUTION TEST CHA
NBS - 1010a
(ANSI and ISO TEST CHART No.

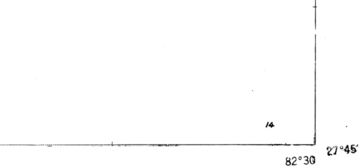


MANATEE HABITAT: Boaters guide to Manatees, the gentle giants, Florida Marine Patrol, 1980.

SEAGRASS BEDS: Tampa Bay Seagrass Maps, 1:10,000 and 1:24,000 Scales, Mangrove Systems. Inc. 1980.
National Wetlands Inventory Maps, 1:24,000 Scale, U.S. Fish and Wildlife Service, 1983.

ARTIFICAL REEFS: Computer Printout of Florida Artifical Reefs, U.S. Army Corps of Engineers, 1981. Recreational Use Reefs in Florida: Artifical and Natural, Florida Sea Grant Program, 1979.

FOR COMPLETE REFERENCE SEE MAP NARRATIVE



colony sites. Colony sites and species - composition data are included in the narrative.

Shorebird

Wading Bird

Brown Pelican

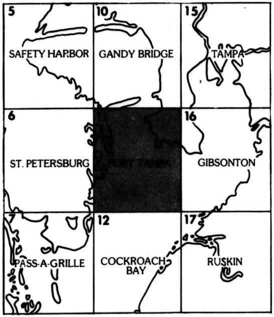
WEST INDIAN MANATEE HABITAT

STATE MANATEE SANCTUARY

▨ **SEAGRASS BEDS**

■ **ARTIFICAL REEF***
(Permitted by Florida Dept. of Environmental Regulation)
Numbers next to reefs refer to composition data in narrative

**Symbols appearing with numbers are described more fully in the narrative.*



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MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)

2.5
2.8
2.2
4.5
5.0
3.2
2.0
5.6
6.3
3.6
4.0
1.8

10
11
12.5
14
16

10
11
12.5
14
16